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ABSTRACT

Concerned with the validity of the audience data reported by two major syndicated magazine readership services--Mediamark Research Inc. (MRI) and Simmons Market Research Bureau (SMRB)--a study examined the differences in MRI and SMRB calculations of reader turnover rates, which form the basis for estimating audience accumulation. Results indicated that the MRI recent reading method of determining audience accumulation tended to produce significantly lower turnover levels than the SMRB two-interview method, but that the differences were contingent on circulation size. MRI turnover levels, for example, were no different than those provided by SMRB for publications with circulations under 500,000. The reason for this finding may have been based on complex interactions of the proportion of in-home to out-of-home readers, the circulation size, and the frequency of reading measure. Since SMRB and MRI defined readership differently, the findings did not indicate which method of determining audience accumulation was most effective. (MM)

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ADVERTISING DIVISION

Examining the Validity of Audience Accumulation Measures:
A Comparison of MRI and SMRB

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ABSTRACT

Examining the Validity of Audience Accumulation Measures:
A Comparison of MRI and SMRB

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The validity of the audience data reported by the two major syndicated magazine readership services--MRI and SMRB--remains a hotly debated issue. Most research to date has focused on the single-issue readership estimates provided by these services. The present study addresses a second issue, of at least as much importance--audience accumulation estimates.

In this study, we examine differences in MRI and SMRB turnover rates, which serve as the basis for estimating audience accumulation. Our results indicate that while MRI tends to produce, on average, lower turnover rates than SMRB, differences are dependent upon magazine circulation size. We argue that the reason for this finding is based on a complex interaction of in-home and out-of-home readership levels, circulation size, and the frequency-of-reading question used by MRI to estimate turnover.

Presented to the Advertising Division, Association for Education in Journalism and Mass Communication, National Convention, Gainesville, Florida, August, 1984.

Examining the Validity of Audience Accumulation Measures:
A Comparison of MRI and SMRB

Introduction

The validity of magazine audience measurements used by the two major magazine readership services, Mediamark Research Inc. (MRI) and Simmons Market Research Bureau, Inc. (SMRB), remains a key issue for a majority of media researchers. SMRB uses an issue-specific method referred to as "through-the-book," while MRI employs a "recent reading" or time-specific method. Little was published on these methods until 1978, when W.R. Simmons and Associates, Inc. merged with TGI to form SMRB. SMRB then decided to combat the problem of measuring a large number of magazine titles in a single study by combining their through-the-book method with TGI's form of recent reading. This new combined measurement technique raised questions and increased concern about the "comparability" of these two conceptually and methodologically differing approaches.

These concerns were strong enough to prompt an Advertising Research Foundation (ARF) Comparability Study in 1979. The purpose of the study was "not to evaluate the accuracy or appropriateness of either of the two magazine measurement methods ... but to determine the degree and patterns of differences between the two methods." (Gatty, 1980) Samuels, J. Walter Thompson's Research Director, echoed this sentiment, saying, "It doesn't make a difference which service is wrong or right because the definition of

reader is not the same...MRI simply broadens the definition to include lookers or seers, not actual readers (Lechten, 1980)."

ARF discovered that the SMRB recent-reading method produced audience levels significantly higher than the mixed through-the-book method for all magazines, especially among readers claiming to have read outside of their home (ARF Comparability Study, 1980). A 1983 report by Bernstein and Montoya confirms this conclusion. Their analysis shows that MRI records a 44% higher level of readership than SMRB, with MRI recording twice as many out-of-home or incidental readers as SMRB. They attribute this difference to the inability of SMRB's issue-specific method to include individuals who have experienced a brief or incidental exposure to a magazine. SMRB's "skeletonized" test issue may not be recognized by an incidental or casual reader (SMRB removes all but the editorial content of the magazines studied).

This comparison of SMRB's through-the-book and recent-reading method has been generalized to include any recent-reading method, specifically MRI's. Many magazine articles (Papazian, 1980; Rozen, 1980; Marketing and Media Decisions, 1979 and 1980; Lechten, 1980) have been written in response to this controversy. To this date, however, no one has a solution to this magazine audience measurement problem.

While most discussions thus far have focused on single-issue readership estimates, magazine scheduling is not based

solely upon these figures. Rather, media planners must consider various estimates of audience accumulation in calculating the reach and frequency of various vehicle combinations. Therefore, the focus of our study is upon audience turnover levels-- the figures used in calculating audience accumulation. The following is a brief review of the previous research on the turnover rates of MRI and SMRB.

As has been documented (Richard and Frankel, 1983; Pavlik, 1983), the MRI recent-reading technique and SMRB through-the-book magazine readership method produce significantly different turnover levels. Differences between the two sets of turnover levels are apparently due to methodological differences in the ways in which they are determined. While SMRB employs a two-interview technique to estimate average issue audience and turnover, MRI uses a single interview to determine average issue audience with a frequency-of-reading question added to estimate turnover.

A 1983 study by Richard and Frankel (using 1981 data) shows that the MRI method tends to produce significantly lower turnover levels than the SMRB method. They ascertain that since the SMRB two-interview method is based on the "respondent's direct testimony," the data obtained by this method are of "direct empirical quality." Therefore, Richard and Frankel conclude, "there can be no question... that the estimates of accumulation and duplication extended beyond one issue are wrong if those estimates are based on the results of only one interview" -- as in the case of the

MRI method.

The validity of this argument and its conclusion, however, must be questioned. Richard and Frankel themselves note that, "Turnover is...the proportion of the audience from one issue or time period that would not be part of any other single randomly selected issue or time period." (Emphasis added.) The SMRB two-interview method--used by Richard and Frankel as their benchmark--does not meet this definition (of course, neither does the MRI method). By interviewing subjects "at least six weeks apart" the method is clearly not randomly choosing a second issue or time period.

Since neither MRI's nor SMRB's method fulfills the definition of turnover, we cannot conclude through a process of logical deduction, nor empirical testing, which method is "right" and which is "wrong." Rather, we can only hope to identify the differences between the two methods, determine why they occur and choose the method that best satisfies the proposed media objectives. With this in mind, we designed the present study to examine the differences in turnover rates between MRI and SMRB, and the conditions under which they may or may not hold.

Study Design

For the present study, we are using 1982 readership data for the 96 titles common to SMRB and MRI (the authors thank Backer and Spielvogel, Inc. for allowing us access to these data). Our analysis focuses on a comparison of audience turnover rates for the two readership services. Circulation size will be controlled for in the analysis in an attempt to identify any contingent conditions under which turnover rate differences may or may not hold. Circulation figures are used for several reasons, including their importance in media planning and their previous use by Richard and Frankel (1983). They also provide an independent measure of readership (i.e., circulation is determined independently of SMRB and MRI).

Results

Examining the results presented in Table 1, we immediately see that the overall mean turnover rate for MRI (.34) is significantly lower than for SMRB (.40). This result is consistent with Richard and Frankel (1983). The reason for the lower MRI turnover rate is apparently that the respondents answering the frequency-of-reading question (used in the recent-reading method) tend to report their reading behavior to be at a somewhat more consistent level than if asked at two separate points in time.

Table 1 also indicates that for MRI, turnover increases progressively for each lower circulation level, reaching its highest level of .41 for periodicals with a circulation under 500,000. For SMRB, turnover rates are lowest for publications with circulations of five million or more. For periodicals with circulations below five million there are no significant differences in turnover rates, although the data do show slightly higher turnover rates for periodicals with circulations under one million.

The data also show that MRI's turnover rates are significantly lower than SMRB's for periodicals of five million-plus circulation. Similarly, MRI's turnover rates are markedly lower than SMRB's for periodicals of 2 million to 4,999,999, 1 million to 1,999,999, and 500,000 to 999,999. Importantly, however, the differences decrease as we move to each lower level of circulation. In fact, for those periodicals with a circulation below 500,000, we find

that the MRI turnover rate is not significantly less than the SMRB rate.

In other words, our results indicate that turnover systematically decreases for both methods as circulation increases. More importantly, turnover levels are essentially equal for both methods for publications under 500,000 in circulation. The results, then, directly contradict Richard and Frankel who state that, "Monthly publications above two million in circulation behave no differently with either method than do those under two million in circulation." Our results have several implications. First, since turnover systematically decreases as circulation increases, one must conclude that readership is more consistent across issues--i.e., frequency will build up more quickly--for large circulation publications.

Perhaps more importantly, since there is no difference in turnover levels between MRI and SMRB for small circulation monthlies, the MRI-SMRB debate is not a one-dimensional issue. Rather, we feel that it entails a complex interrelationship of several factors, including in-home and out-of-home single-issue reach estimates, circulation size and the frequency-of-readership measure.

To explain, since turnover is lowest for larger circulation publications, this indicates that reported readership consistency--as elicited from the frequency-of-reading question used by MRI--is greater for larger

circulation publications. The reason for this seems most likely to stem from the interaction of circulation size and in- and out-of-home readership. Consider the data in Table 2. For MRI the ratio of in-home to out-of-home readership for small publications is .77:1. For SMRB it is 1.36:1. The same statistic for publications over 500,000 is 1.40:1 for MRI, and 2.37:1 for SMRB. In other words, in-home readership increases in proportion to out-of-home as circulation increases. Next, consider the interaction this would have with a frequency-of-reading question.

Individuals who read a magazine in their own home probably subscribe to it, and read it regularly. Conversely, persons who read a magazine outside their own home probably only read it on occasion, when they are in the doctor's office, etc. Therefore, we would generally expect lower turnover levels for in-home rather than out-of-home readers. As a result, we would also expect that as in-home readership as a portion of total readership increases, turnover would decrease. Conversely, as in-home proportionately decreases, turnover would increase. The negative correlations in Table 3 clearly support this argument (i.e., they show that in-home readership is inversely related to turnover levels, while out-of-home readership is either not related or only weakly related to turnover).

A logical question might be: since the in-home to out-of-home ratio is always greater for SMRB than for MRI, shouldn't SMRB actually have a lower turnover rate than MRI?

The answer is "no" because MRI uses the frequency-of-reading question, while SMRB uses the two-interview method.

Summary and Conclusion

In confirmation of Richard and Frankel's earlier findings, we have found that, in general, the MRI recent-reading method tends to produce significantly lower turnover levels than the SMRB two-interview method. In contrast to earlier findings, however, we have also shown that differences between the two are contingent upon circulation size. Specifically, we have shown that MRI turnover levels are no different than those provided by SMRB for publications with circulations under 500,000. This finding supports our contention that Richard and Frankel may be incorrect in concluding that the MRI method invariably produces incorrect turnover estimates--if we assume for a moment that the SMRB estimates are "correct."

Furthermore, we suggest that the reason for this finding is based on a complex interaction of these factors: the proportion of in-home to out-of-home readers, the circulation size, and the frequency-of-reading measure.

Finally, since both SMRB and MRI define readership differently, and neither fulfills the definition of turnover, one cannot conclude which method is better. Until a valid method of calibrating the two research bureaus' figures is discovered (if indeed there is one), determination of which figures to use should be done according to the type of advertisement being placed.

For example, if the ad to be placed requires a high level of reader involvement (e.g., has a large amount of

copy or is very technical), SMRB's definition of readership and the figures obtained by it, would better fulfill a media planner's objectives. But, if the ad is only designed to create an image or build brand awareness, then MRI's figures may be more appropriate.

Thus, before choosing which figures to use, one must evaluate the goals and objectives of the advertising, and then select according to the readership criteria specified by each service. But, for those who are still unconvinced, Ed Papazian (1980) suggests: "If you are really interested, ask SMRB to send an interviewer over and take you through the through-the-book interview... and then do the same with MRI and the recent-reading method... you may come up with some ideas of your own."

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Table 1

Mean Turnover Rates for MRI and SMRB
by Circulation*

	<u>MRI</u>	<u>SMRB</u>	
Overall	.34	.40	n=96
Circulation 5,000,000+	.20	.30	n=12
2,000,000- 4,999,999	.33	.41	n=13
1,000,000- 1,999,999	.32	.40	n=24
500,000- 999,999	.37	.43	n=30
<500,000	.41	.43	n=17

*Note: Statistical tests are not run because we are using virtually the entire 1982 population of magazines surveyed, not a sample.

Table 2

In-Home and Out-of-Home Readership* for MRI and SMRB
by Circulation

	<u>MRI</u>		<u>SMRB</u>	
	In Home	Out of Home	In Home	Out of Home
Circulation 500,000+	5/82	4125	4725	1991
Ratio	1.40:1		2.37:1	
Circulation <500,000	922	1185	811	595
Ratio	0.77:1		1.36:1	

*Note: Readership figures are in 000's.

Table 3

Pearson Correlation Coefficients between
Turnover and Readership

	<u>MRI</u>		<u>SMRB</u>	
	In-Home Readership	Out-of-Home Readership	In-Home Readership	Out-of-Home Readership
MRI Turnover	-.40	-.19	-.25	-.08
SMRB Turnover	-.34	-.09	-.36	-.03

N=96